

STEM (Science, Technology, Engineering, and Math) CERTIFICATE OF ACHIEVEMENT

In today's rapidly evolving world, STEM education forms the backbone of innovation, economic growth, and future career opportunities. The Certificate of Achievement in STEM (Science, Technology, Engineering and Mathematics) Preparation provides students with a solid foundation towards an academic or technical career in STEM, offering course prerequisites to, or part of, existing program core courses. Students receiving this certificate will gain an understanding of career choices, especially in STEM-oriented areas, and the knowledge needed to make an informed decision about embracing the pathways leading to an advanced degree and a career in a STEM field.

Required Courses

Course Number	Course Name	Units
MTH 121	Trigonometry	4
MTH 200	Precalculus Mathematics	5
SCI 200	Exploration of STEM Fields and Careers	1

Plus 7 - 9 additional units selected from the following

Course Number	Course Name	Units
BIO 200	Concepts to Biology	3
CHM 200	Introduction to Chemistry	5
CSC 220	Introduction to Computer Science	4
PHY 202	Introductory Physics	4

Total units required for Certificate

17 - 19

Program Level Student Learning Outcomes:

1. Demonstrate the ability to use symbolic, graphical, numerical, and written representations of mathematical and scientific ideas.
2. Use appropriate technology, exercise problem-solving strategies, use the scientific method, and judge the reasonableness of their results.
3. Describe opportunities in STEM and identify degree requirements for a career in a selected STEM field.

Career Opportunities in STEM

A degree in a STEM field can lead to a variety of different jobs and career paths such as data science, machine learning, and artificial intelligence; scientific, and technical consulting; mathematical and scientific research and development; medicine, bioinformatics, ecology, higher education, law and public policy development; economics, finance, and actuarial science.